

OLDEST BEE PAPER IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED IN 1861

DEVOTED EXCLUSIVELY TO PROGRESSIVE BEE CULTURE.

Vol. XVIII.

Chicago, Ill., August 16, 1882.

No. 33.

THE AMERICAN BEE JOURNAL

Published every Wednesday by

THOMAS C. NEWMAN,

EDITOR AND PROPRIETOR.

925 WEST MADISON ST., CHICAGO, ILL.

At \$2.00 a Year, in Advance.

WEEKLY—(52 numbers) \$2 a year, in advance.
Three or Six Months at the same rate.

George Neighbour & Sons, London, England, are
our authorized agents for Europe.

Postage to Europe 50 cents extra.

TOPICS PRESENTED THIS WEEK.

Editorial—

Editorial Items.....	513.	514
A Disturbance in Cyprus.....	513	
Death of Jesse C. Estlack.....	513	
The "Gap" in the Honey Season.....	514	
The Labors of the Drones.....	515	

Convention Notes—

Local Convention Directory.....	515	
National Convention.....	515	

Among Our Exchanges—

The Honey Yield, and Taxing Bees.....	516	
Adulterations.....	516	
Syrian Bees.....	516	
Handling Bees.....	516	
The Length of Life of Worker Bees.....	516	

Correspondence—

That Long, Long Day with Mr. Clarke.....	517	
Sending Queens by Mail to Canada.....	517	
Notes on Honey Plants.....	517	
How I Extract Honey from Combs.....	518	
Cultivation of Simpson Honey Plant.....	518	
The Honey Harvest.....	519	
The Common Sense Bee Hive.....	519	
Increase of Colonies.....	519	
The Utility of Untested Queens.....	520	
Dunham vs. Given Foundation.....	520	
How to Exhibit at the Fair.....	521	
The National Convention.....	521	

Selections from Our Letter Box—

Foul Brood.....	522	
Customs Duties.....	522	
Good Season in Utah.....	522	
A Honey Plant.....	522	
Width of Sections.....	522	
All Swarms and No Honey.....	522	
Cleaning Wax Extractors.....	523	
My Report to Date.....	523	
Apis Mellifica.....	523	
Sweet Clover the Only Hope.....	523	
Dividing and Introducing.....	523	
Fertile Worker.....	523	
Ground is Baked Like a Brick.....	523	
Mr. Shack's Problem.....	523	
Juneau County, Wis.....	523	
Entomological.....	524	
Golden Dollars vs. Golden Bands.....	524	
Whose Loss is it?.....	524	
My Honey Crop.....	524	
Honey Enough to Winter On.....	524	
Iron Lugs for Hanging Broad Frames.....	524	
Afraid of Robbing.....	524	
A Good Season.....	524	
A Fair Yield Anticipated.....	524	



A Disturbance in Cyprus.

We learn by a dispatch dated at Larnaca, Cyprus, Aug. 10, that a great anti-Christian demonstration has occurred. At the funeral of a Moslem who was found murdered, and whose death was attributed to the Christians, the outbreak occurred. The police are in full sympathy with the mob, and all is in a state of anarchy. A score of Christians were arrested, one was killed, and many fled to the mountains for safety. At the time of this writing (Aug. 11) further disturbances are feared. The brevity of the dispatch may give rise to apprehensions all over the world for the safety of Mr. Frank Benton and wife, who are residents of Larnaca, and from whence their correspondence has heretofore been dated. We think all fears for his safety are needless, because Mr. Benton is a man who is most likely to ingratiate himself in the favor of any community in which he may reside, and in Cyprus, as in fact in all countries of the Old World, Americans are in great favor. With the business and higher classes, they have become especially popular on account of their intelligence and energy; and with the lower classes, on account of their liberal views and peculiar form of government at home. Europeans, especially those of Eastern Europe, have a marked preference for the American people and the United States government, regarding them as the true exponents of national freedom. Any mishap to Mr. Benton might well be considered a national calamity, and would be regretted by the bee-keepers of the

whole world, who cannot but recognize his self-sacrificing labors in attempting to introduce *Apis dorsata* to the public. We think there is no reason for apprehension.

Death of Jesse C. Estlack.—Mr. I. N. Whitely, writes us from Denver, Col., of the death of Jesse C. Estlack, which occurred at Littleton, Col., Aug. 5, 1882. Mr. Whitely says:

Mr. Estlack was born in New Jersey, Dec. 6, 1818, and removed to Colorado in 1859. He was an energetic and enterprising farmer and bee-keeper, and through industry and economy has accumulated a large property. He leaves a wife and family to mourn the loss of a kind husband and father, and the community the loss of a worthy citizen.

☞ We have received from Mr. James Heddon, Dowagiac, Mich., one of his queens which produces the "long, leather-colored, docile workers," sent here to be tested upon her comparative merits. The workers accompanying her were fine, large, well-developed bees, and though not as yellow as some Italians we have, nor as "frisky" as our Syrians, yet they are perfect beauties. The queen is a fine specimen of regality, and when released from her introductory prison, marched down among her Syrian subjects with a royal, dignified movement that seemed to command the respect and devotion she undoubtedly deserves. We expect to render no disparaging report concerning her progeny.

☞ We regret to learn that on the night of Aug. 5th, the residence of Mayor W. J. Andrews, ex-President N. A. B. K. Society, at Columbia, Tenn., with contents, and several colonies of bees, were destroyed by fire. Loss over \$5,000, on which there was an insurance of only \$2,500.

The "Gap" in the Honey Season.

O, for forty acres of sweet clover (mellilot) now, to fill up the gap between basswood and the autumn flowers that come in August and September. The acre we have tells the true story of what we ought to have.—JAMES HEDDON.

If it was not for the sweet clover, bees would be idle. Still, they keep up their hum of rejoicing from sunrise until dusk, bringing load after load of transparent nectar, that God, in his all-wise providence, causes to be secreted in the bloom of mellilot or sweet clover.—H. W. GARRETT.

We give in this number two communications of especial interest to bee-keepers, either of which will be worth many times the subscription price of the BEE JOURNAL to any apiarist who will profit by the information contained in them. One is by Dr. G. L. Tinker, with "Notes on honey plants," page 517; the other by J. G. Steer, subject, "Cultivation of Simpson honey plant (figwort)," page 518. Both are highly practicable, and come at a time to allow of the fullest preparation to profit by them.

In this connection it may be well to remark this season has been a peculiar one, and just now is the time when the "gap" is occurring between basswood bloom and fall honey flowers. In a few localities, particularly Dr. Tinker's, this gap is not so noticeable, but, as a rule, there is a serious break in the natural bloom which is quite damaging to the fullest possibility of a honey yield. Fortunately for us, we are in the vicinity of an abundant sweet clover pasturage, which not only supplements the white clover harvest, but curtails it by reason of enticing the bees from it before the nectar has ceased to flow, and even renders basswood scarcely desirable. Wherever sweet clover prevails this season, we anticipate there will be no cessation in the honey yield till closed by the advent of winter. With even a moderate amount of it, bees will still keep up their breeding as vigorously as ever, and be in the strongest condition to take advantage of the more plentiful fields of buckwheat, goldenrods, asters, heartsease, Spanishneedle, bergamot, etc.

We introduce this article with two extracts from this paper. The first, written by James Heddon, gives evidence of a deep sense of duty, and a carefully formed opinion, which will carry conviction to thousands of readers who have been deliberating and waiting for some just such practical authority as Mr. Heddon to endorse the feasibility of planting for honey, and to suggest what to plant; and thousands will adopt his excellent hint, and in the future thank him for

his earnest expression. Mr. Heddon we think will, with the assistance of his initial acre of sweet clover, have a very satisfactory season's report to make at its close, especially should the weather be favorable for gathering from the late flowers.

The second extract is from a letter by Mr. H. W. Garrett, in New York. His is an expression of gratitude for bounties which are within the reach of all, with the expenditure of a little time and less money. His report comes from a State which has been peculiarly unfortunate in its realization of a good honey crop. He does not tell us whether his sweet clover was planted especially with a view to the yield of honey or whether it is a semi-spontaneous yield, being a survival and self-seeding from former cultivation for other purposes.

We feel grateful to Dr. Tinker for demonstrating the value of his golden honey plant, and especially for the information that if properly and seasonably sown, it will grow and bloom the same season sown. In this, and perhaps this only, it is superior to sweet clover, for many apiarists are too impatient or thoughtless to put in a crop, even with the assurance of large profits, where they have to await the second season before realizing from it, because their profits have heretofore been large and their returns speedy. With honey-producing as a specialty, however, the methods formerly prevailing will all, or nearly all, be changed; and in nothing will the change be so radical as in bee pasturage. To make of bee-keeping a specialty, it will be necessary to provide against the probability of crop failures, and in no way can this be done except by providing a certain and continuous honey flow. It is gratifying to know, that through the efforts and persuasions of the BEE JOURNAL, there are hundreds of shrewd, discriminating, intelligent apiarists in America at the present time experimenting with honey-producing flowers, and observing the effects of climate and soil not only on foreign plants, but also on those indigenous to our own country, and the next ten years may see as substantial improvement in this direction, as the past ten have witnessed in quality and appearance of product. Not until there are four months of continuous flow will bee-keepers be satisfied, and this we believe to be as possible as a continuous season of life-sustaining

vegetables. No bee-keeper is worthy to be styled an *apiarist*, who cannot in the not far distant future point to his cherished bee-pasture, and reckon with some degree of certainty on his season's yield.

Henry Alley, reports from Massachusetts as follows, dated Aug. 9:

For 17 days in succession my thermometer has been up to 90° in the shade, and on several days it indicated 99° and 100°. About everything in the shape of vegetation was dried up. Last night distant thunder showers brought us some rain, and all is changed this morning. Goldenrod is coming into bloom, and I look for plenty of fall flowers for my bees to feed on.

Last season we experienced a protracted drought here, but the sweet clover never failed us, and this season, although wet and cold weather has prevailed, the bees can recognize no "gap" in the honey flow, but are working merrily when the sunshine allows them to do so.

Just a year ago this week, a small bee paper was started in New England and for 3 months it was issued weekly—struggling for an existence. It was then suspended, with the promise that after a rest of 2 months it would resume as a monthly. A few were inveigled into subscribing for it for 1882, but only one number has been published this year—and that not until April or May. It is therefore safe to conclude it "dead," and this will serve as its "obituary notice." It leaves a few subscribers who have been swindled out of the money advanced for subscription, and sundry debtors "mourn" because of misplaced confidence in trusting the publisher. Being one of the "mourners," last mentioned, we "speak that we do know."

We notice an advertisement in the *Empire State Agriculturist* which should please even the most ardent cheap queen advocate—offering to "sell" a "beautiful untested Italian queen for fifteen cents!" If *cheapness* in queens is all that is desired, every one should now be happy! Wonderful bargains! Prodigious economy!! Only 15 cents for a "beautiful Italian queen"!!!

Our new location, No. 925 West Madison St., is only a few doors from the new branch postoffice. We have a telephone and any one in the city wishing to talk to us through it will please call for No. 7087—that being our telephone number.

The Labors of the Drones.

Prof. B. Silliman, editor of the "American Journal of Science and Arts," published at New Haven, Conn., has sent us an old manuscript, written by the Rev. Elisha D. Andrews, Armada, Macomb Co., Mich., Oct. 7, 1851, giving the latter gentleman's views on several important points in bee-culture.

Prof. Silliman remarks that he found the old manuscript among his late father's papers, where it had been for many years. He desired us to look it over, and if anything of interest was discovered to print it in the interest of scientific bee-culture.

The Rev. Elisha D. Andrews states, in the manuscript, that the object of his writing it was to subject his "discoveries to a strict, scientific scrutiny and criticism." He then adds: "If they will bear this test, I am disposed to have them given to the world, as some little addition to the accumulating science of the age."

One part, in particular, is interesting to us at the present time, and that is in relation to the character and object of the drone bee. He says:

They are considered, as it respects the labor of the hive, an idle and useless race—only a nuisance as their name proverbially denotes. Now, this I consider a perfect slander. From 30 years' observation I can testify that there are no bees in the hive that pursue their work with so much ardor and zeal as the drones. It is true, they do not make their appearance abroad till the warm weather in May and June, and not in the early morning nor late in the afternoon, nor at any time when the weather is cold and damp, but they are never seen idly basking about the entrance of the hive, and in the middle of the day, when the weather is hot, they come out of the hive in great numbers and in great haste, rushing through and over the worker bees that lie idle about the entrance of the hive. There are no bees in the hive that seem to show such earnestness in their work as these poor slandered drones, but it may be asked, what are they about, that they are not earlier at work, and why do they retire before the other bees cease labor? Have we any right to suppose that they have no office to perform, and are quite idle while in the hive? They are such zealous workers when abroad, that I am inclined to be charitable, and believe they are employed in some work of benevolence when out of sight. Why may we not suppose that they are nurses of the young bee in the larval and chrysalis state, employed to brood over them and keep them warm, when the weather is at too low a temperature for their comfort and growth, and to feed and

nourish them as they need, and whenever the temperature of the weather rises to the necessary point, these nurses go forth in search of such food as the young demand? The zeal with which they labor seems very much like the promptings of parental or maternal affection.

The American Express Company money order system is the cheapest, safest and most convenient way of remitting small sums of money. Their rates for \$1 to \$5 are 5 cents; over \$5 to \$10, 8 cents. They can be purchased at any point where the company have an office, except Canada, and can be made payable at any one of the company's 4,000 offices.

Paid orders are filed in the Treasurer's office, and always accessible for reference, and the remitter gets a receipt for money sent.

For safety, when sending money to this office, all should get either a post office or express money order.



Local Convention Directory.

1882. *Time and Place of Meeting.*
- Sept. 5—N. W. Ill. and S. W. Wis., at Rockton, Ill. Jonathan Stewart, Sec.
- Oct. 3-6—North American, at Cincinnati, O. Dr. Ehrick Parmly, Sec., New York City.
- 5—Kentucky Union, at Shelbyville, Ky. G. W. Demaree, Sec., Christiansburg, Ky.
- Tuscarawas Valley, at Newcomerstown, O. J. A. Bucklew, Sec., Clarks, O.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

The National Convention.

The following is the official call of the Secretary, Dr. Parmly, for the Convention of the North American Bee-Keepers' Society. We hope there will be a large attendance:

The North American Bee-Keepers' Society will hold their 13th annual meeting at Washington Park Hall, Cincinnati, O., across Washington Park from the Exposition building. Time, Oct. 3rd to 5th, 1882. First session Tuesday, 10 a. m., Oct. 3. We are encouraged to hope that this will be a very profitable meeting, as we are promised papers from, and the presence of, a large number of our most prominent bee-keepers both in the United States and Canada, and essays and implements of the apiary are expected from abroad to add to the knowledge imparted by the research and inventive skill and methods of our countrymen.

EHRIK PARMLY, Sec.
New York, July 12, 1882.

The summer meeting of the Mahoning Valley Bee-Keepers' will take place at Berlin Center, Ohio, on Saturday, Aug. 19, 1882, at 10 a. m. All interested in bee-keeping are invited to attend. Turn out. Do not forget your wife, daughter, son and lunch basket. We expect a happy and profitable time.

L. CARSON, Pres.
M. HAUGHN, Sec'y.

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL, }
Monday, 10 a. m., August 14, 1882. }

The following are the latest quotations for honey and beeswax received up to this hour:

Quotations of Cash Buyers.

CHICAGO.

HONEY—I am paying 7c. for dark and 9c. for light extracted.
BEESWAX—Choice lots are worth 25c. here; bright yellow, 24c.; dark to good, 17c. to 22c.

AL. H. NEWMAN, 923 W. Madison St.

CINCINNATI.

HONEY—The market for honey is quiet. Extracted brings 7c. to 10c. on arrival. No comb honey on the market worth mentioning, prices nominal.
BEESWAX—Scarce, and brings 20c. to 25c. on arrival.

C. F. MUTH.

Quotations of Commission Merchants.

CHICAGO.

HONEY—The crop of 1882 is beginning to come forward, and so far very nice goods have been offered. Sales range at 14c. to 20c. per lb.; one pound sections selling at the highest range, when well filled and white. Extracted, few offerings and demand light at 8c. to 9c.

BEESWAX—25c. for prime yellow; dark 18c. to 22c.

R. A. BURNETT, 165 South Water St.

NEW YORK.

HONEY—White clover, fancy, 1 lb. bxs., 15c. to 16c.; white clover, good to choice, 1 and 2 lb. bxs., 13c. to 14c.; buckwheat, 2 lb. bxs., per lb., 11c. to 12c. Extracted and strained, white, 9c. to 10c.; dark 7c. to 8c.

BEESWAX—The market is quiet and the tone a shade weaker. Western, pure, 26c. to 27c.; Southern pure, 27c. to 28c.

D. W. QUINCY, 105 Park Place

CLEVELAND.

HONEY—The market is quite active with us; it is beginning to come forward more liberally, and the demand is more fully met. For two days past we have not been able to sell for over 22c. per lb. for best white 1 lb. sections; of 2 lb. sections none have been received. Extracted we hold at 14c. for small packages, but have not made any sales.
BEESWAX—25c. to 28c.

A. C. KENDEL, 115 Ontario Street.

SAN FRANCISCO.

HONEY—The market is firm for extracted and choice comb. Offerings and demand are light.

We quote white comb, 17c. to 18c.; dark to good, 8c. to 13c. Extracted, choice to extra white, 9c. to 14c.; dark and candied, 7c. to 7½c. BEESWAX—28c. to 30c.

STEARNS & SMITH, 423 Front Street.

BOSTON.

HONEY—Trade quiet. We quote at 20c. to 22c., according to quality.

BEESWAX—Prime quality, 25c.
CROCKER & BLAKE, 57 Chatham Street.

ST. LOUIS.

HONEY—A fair movement in strained at 7½c. to 8c. one lot of 25 bbls. reported sold at 8c. Some new comb (choice white clover offered), but little sold—held at 18c. to 20c. per lb.; extracted quiet at 9c. to 10c.

BEESWAX—Easier at 26c. to 27c. for prime.

R. C. GREER & Co., 117 N. Main Street.

A Sample Copy of the Weekly BEE JOURNAL will be sent free to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.



MISCELLANEOUS.

The Honey Yield, and Taxing Bees in California.—The *Semi-Tropic California* for August contains the following items:

The honey yield this season throughout California will be far from encouraging to our bee-men. These off years that are so frequent might be largely averted by turning more attention to growing certain trees and plants for bee forage.

The Supervisors sitting as a Board of Equalization for the County of Los Angeles, refused to lower the valuation as made by the County Assessor on the bees of the county, though some of the owners of bees in the county offer to sell all the bees they have at one-half the assessed value for this year. They are assessed at \$3 per hive.

Adulteration.—The *Bee-Keepers' Exchange*, for August, has a very strong article on the above subject, from the pen of J. K. Douglass, Neosho, Wis. It is certainly worthy of note that bee-keepers, especially, are unanimous in their condemnation of the frauds which prevail to so great an extent in adulterating honey, as well as other articles of food. We give the last paragraph of the article alluded to, which is as follows:

On page 308 of *Gleanings* for 1882, the editor expresses a hope that the price of honey will be so low this season that more than usual will be consumed, and on page 296 he tells of one way to cheapen its production. I will quote the suggestion for the benefit of those who may not have seen it: "Pretty soon, and the wax of the world will be gone. What shall we do? I will tell you if you won't be scared. For brood combs use wires and go back to our old paraffine experiments of years ago. Had we only put wires into the frames as we do now, we should have succeeded without trouble. For comb honey we can use a mixture of wax and paraffine that the bees will work out much faster than pure wax; and for our small 44 sections, I think we can manage so that sagging will do no harm." So it seems that the honest producer of comb honey may have to compete with adulteration and fraud; for, of course, no honest man would think of selling comb honey built on adulterated foundation, for pure goods and any attempt to sell it for anything else would only result in failure. When I read the above extract I never thought of being scared, but I made up my mind that considering the frequent exhortations to honesty indulged in by it, that consistency

is not one of the jewels that adorns that much mentioned type writer. Any one who will adulterate food is both to be feared and despised—feared for the consequence of his nefarious practices and despised for harboring the motives that prompt their commission. It is possible that my views on the subject of adulteration are too radical for this progressive age, but I think one who adulterates food products, merits a much greater punishment than does the utterer of counterfeit money, as the value of health is greater than riches.

Syrian Bees.—Mr. E. R. Root, in the *Canadian Farmer*, sums up the character of the Syrian or Holy Land bees as follows:

In summing up a few of the good features of the Holy Lands, we find, from the above facts, first, they raise a great abundance of cells at one rearing; secondly, the cells are started so that they hatch at or nearly the one time; lastly, if the cells are not too much disturbed, the queen will hatch out strong and healthy.

Now, a word in regard to the Holy Lands as honey gatherers: My experience has led me to think they are equally as good as the Italians, and some say a little superior. Being originally reared in a hot, dry country, they have necessarily been obliged to gather honey at every opportunity available, or the race could never have existed. In this country, they of course manifest the same energetic disposition; and hence, as far as my observation goes, gather some honey after the basswood flows, even when the other bees are apparently inactive.

After what has been said I would not have it understood that I have any the less regard for the Italians than before; but, on the contrary, all things considered, I think they possess many qualities far superior to other races of bees, and will probably always retain the front rank.

My object in writing this is not to give the Holy Lands undue praise, to the exclusion of the Italians, but to bring forth a few of the good qualities which are justly their due. I do not deny that the Holy Lands have a few bad features; but these, I think, have been fully discussed before.

Handling Bees.—The *Indiana Farmer* gives the following on handling bees:

Many people are deterred from the keeping of bees by the dread of being stung, and many who have bees run them on the let-alone plan, simply because they do not understand the first principles by which they are governed. Only a few days since, a gentleman visited our yard, who owns a good many colonies, looking for, as he expressed it, some plan for their management with the least possible chance of coming in contact with their "business end." His dread of being stung was so great that we could hardly induce him to come within ten feet of a colony. After we had removed the

cloth, lifted out and replaced the frames in several without any signs of being stung, he began to think it was not such a terrible feat after all. Gentleness is the first and most important feature, as regards handling them. Quick, active motions and sudden jars will anger them very much at almost any time. We many times work in the yard all day long without having to resort to smoke to quiet them, still we would not recommend this plan to amateurs, as it requires considerable familiarity with their "business end" to be able to stand without flinching, when by accident of some kind, some half dozen resent your interference. It is not much trouble to start the smoker so as to have it handy in emergencies of this kind. In opening hives, avoid all sudden jars, remove the cloth by turning it back, commencing at one corner or end. If the bees show anger, blow a little smoke on them to drive them down out of the way, and you will soon become so familiar with their temperament as to know just how much they will need of this kind of treatment.

The Length of Life of Worker Bees.—

A correspondent in an exchange gives the following on this subject:

I thought I would satisfy myself in regard to the life of the bee in the height of the working season. I had a colony of the little black bees, and on the morning of May 3d I killed the queen, and by carefully looking through their hive I found one black drone and destroyed that in the evening of the same day. I put in a cell for a yellow queen on the 2d of June. She was hatched out and there were a few yellow bees in the hive on the 30th, just 21 days from the time the eggs were deposited. On the 7th of July a few yellow bees were to be seen playing around the hive, and on the 13th of July, just 14 days from the time the yellow bees were hatched out, a few were seen at work with the black bees. Now any one can see that if the yellow bees hatched in 21 days the last black bees were all out by the 30th of June, and if the yellow bees went to work on the 12th of July, the last of the black bees must have gone to work on the 4th of July, making 14 days from the time they were hatched, unless one will go to work sooner than the other. This colony contained nothing but black bees, when the black queen was destroyed; on the 18th of July just 49 days from the time the black queen was destroyed, there was not a black bee to be seen about the hive. I opened it, and not one was to be seen inside. I know that the bees will live longer at other seasons of the year, and I thought this would be a good chance to test in the height of the working season. The hive was examined every day during the whole time, so that no mistake might be made. From the above it will be seen that the lifetime of a honey bee, in the busiest working season, is but four weeks or 28 days.

CORRESPONDENCE

For the American Bee Journal.

That Long, Long Day with Mr. Clarke.

JAMES HEDDON.

I always read the correspondence department of the BEE JOURNAL with great care. The first column, while not always containing the best matter, seldom or never contains anything but first class. The same we know is true of any column under the name of Wm. F. Clarke. When I see this name and this column both together, and my name thrown in for the subject, I am terribly interested. Then, when I come to a place I "must not read," I cannot read it quick enough, of course.

I am very glad to have been able to deport myself in such a manner as to win the esteem of a man of his ability, and feel compelled to thank him for his eulogistic words. I only regret that I fall so short of the ability he gives me credit for.

Regarding our religious controversy which he touched upon with so much feeling, I sought to be as honest with him upon that subject as upon the topic of apiculture, or as I would be in the discharge of a pecuniary obligation. If I am indebted to you I will not deny it; if I am asked how to successfully winter bees every time, I will frankly say, "I do not know how;" if you ask me, "what of another life, where we may extend our pleasant controversies?" I must be honest and say, I do not know. If I have not had evidence that was sufficient to ground any belief either way in my mind, I must be honest and say so. If there is another life, and I find I was in that regard mistaken, I will not have to add dishonesty to my error. Whether there is or is not, it is so by a law in nature, and your opinion or mine will not change it. I have no doubt but that the honest will be as well fitted to enter such an existence as any one, and while here our whole attention and energies are needed in this one, as long as we are so surrounded with mistakes and crime. Right here, while upon this partially out-of-place subject, allow me to say that Mr. Clarke is an exemplary Christian minister, for while he recognizes in others opinions that differ from his own, even upon religious subjects, he fully respects and esteems the honest holder of such opinions. Belonging to the class who teach "Love your enemies," he does not hate his friends, nor those who have not in any way maltreated him. Mr. Clarke has a broad and generous feeling, and, as is usually the case, his Creator is equally broad and generous. These facts make Mr. Clarke a friend to those who honestly differ with him.

But, as ex-editor of the AMERICAN BEE JOURNAL, experimental apiculturist, and correspondent to all the bee papers, I need not say one word in

praise of Mr. Clarke's lively vigor as a contributor. His contributions are those we seize first of all, as the hungry child seizes the cake-plate first at the table. As I have often said, I look upon Mr. Clarke as our poetical contributor—the man whose pen portrays in pictures.

I must confess that I have never before been "looked over" by one who so closely scanned every detail of the apiary. I was not a little surprised at Mr. Clarke's accurate descriptions, and how few the errors made in detailing the same, even to his correct guess that in observing the new-born colony settle down in their new home, I recognized the fulfillment of natural law.

I was glad of the opportunity to convince so candid and intelligent an apiarist as Mr. Clarke, that our crosses between the dark Italians and brown German bees were as gentle as any bees he ever saw; also that they brought in the nectar in a manner excelled by none.

I wish Mr. Clarke, and many other apicultural celebrities, could have been here to see the "long, leather-colored, brown German bees" bring in the basswood honey. They had some reason to be cross when Mr. Clarke was here, though they were not. Basswood is now closed for 1882, and now is the finest opportunity to see these crossed (though not cross) bees dart for the large heads of red clover. O, for 40 acres of sweet clover (melilot) now, to fill up the gap between basswood and the autumn flowers that come in August and September. The acre we have tells us the true story of what we ought to have.

Long will I remember the long day's visit with Mr. Clarke, and the different opinion I formed of the reverend gentleman from that I had formerly held.

Dowagiac, Mich., July 29, 1882.

For the American Bee Journal.

Sending Queens by Mail to Canada.

S. CORNEIL.

According to our revenue laws, animals imported for improvement of stock are admitted free of duty, but all parcels sent by mail are stamped at the Custom House at the international line (called the outport), directing the postmaster not to deliver the parcels till they are examined by the Collector of Customs as to duty. W. W. Cary & Son recently sent a batch of queens to a Mr. Webster in this county. No doubt they reached his postoffice safely, but the postmaster was obliged to send them to the Custom House at Lindsay for examination, where they remained till they died. If I mistake not, this was the second shipment to the same party lost in the same way, making altogether a loss to Messrs. Cary & Son, of nearly \$20, besides the loss and disappointment to Mr. Webster.

It seems the officials at some of the outports acting on their own better judgment, permit parcels containing queens to pass through the mails without being stamped for examination,

because queens have been repeatedly received here without being so stamped, and have been delivered by the postmaster directly to the consignees. Possibly the packages of queens sent out by A. I. Root may more readily show their contents than those sent out by the Messrs. Cary, which might account for their different treatment at the outports.

If the packages were marked thus, "Bees for Improvement of Stock," probably they would be allowed to pass through without further trouble. A safer way would be for the importer to order his queens to be sent to the postoffice where the nearest Custom House is situated, but bee-keepers are not always posted as to the regulations of Her Majesty's Customs.

If other shippers have sustained loss in this way, it might be well to report the fact to the Hon. L. Wallbridge, Bellville, Ont., who, as President of the Ontario Bee-Keepers Association, would, I am sure, most willingly represent the matter to the Minister of Customs, and ask him to instruct the officers at the outports to allow queens to pass through the mails without being stamped for examination as to duty.

Lindsay, Ont., Aug. 7, 1882.

For the American Bee Journal.

Notes on Honey Plants.

DR. G. L. TINKER.

The first flowers on the golden honey plant appeared July 29th, but it will not reach full bloom before the middle of August. The plants grown from the seeds sown last fall are nearly ready to bloom, but the flower buds on that sown the first of April have not yet appeared, although the plants are nearly as large. The tallest are about 5 feet, so that it seems the plant does not reach its full height the first year. The growth along the river from old roots is now (Aug. 1st) from 5 to 9 feet high; that from the seed being only 2 or 3 feet.

The best time to sow the seed is in the fall or late winter, before the ground ceases to freeze. Only a small portion of the seed sown in May or June will germinate. A quantity of seed was sown on the 2nd of June, 16 days after a few plants came up, which will bloom about Sept. 1st. The seed planted about the 1st of April came up in about a week, not one apparently failing to grow. The plants from seed sent to me by Mr. E. M. Coombs, of Indiana, prove to be identical with those growing here.

I have growing in my garden several kinds of honey plants, the most of them new, including six new kinds, the seed of which I received last fall through the kindness of Mr. J. S. Wood, the Vice-President of the Danish Bee Association. Four out of the six are varieties of the *Scrophularia*, viz: *S. vernalis*, *S. lateriflora*, *S. chrysantha*, and *S. lanciniata*. The two latter have already blossoms. Both secrete nectar freely, but the last is a small plant with procumbent stems, and difficult to cultivate. The *S. chrysantha* is a

vigorous plant, growing about 3 feet high, with a great profusion of flowers, which are a little larger than those of our indigenous figwort. It blooms from the 1st of July to the middle of August. The bees work on it with great relish, it being the first to be visited in the morning, and the last to be abandoned at night. I have counted 12 bees at work upon one plant at a time, about seven being the average number to a plant at work all day. One could well imagine what a roar of buzzing bees on an acre of this plant would make. It may be difficult to propagate, on account of the smallness of the seed. I will carefully test it and report again.

The *S. vernalis* is a large, easily propagated plant, and promises to be a decided acquisition. Its large green pubescent leaves now spread out over the ground a space of two feet for each plant, with a prospect of many flower stems. It is perennial, and will not bloom until another year.

The best method of propagating these plants, which will include the figwort or Simpson honey plant, is to prepare ridges in the fall of the year about 3 inches above the level of the soil, or high enough to shed water, and four feet apart. The seed should be sown in February or March, or before hard freezing weather ceases in late winter. Taking advantage of a thaw, when a drill a half inch deep should be scratched on the ridges and the seed thinly sown and covered. The plants appear later than ordinary weeds, are very small at first, and require care to cultivate, keeping all weeds down. After they are two inches high, they may be thinned out to a foot apart, or they may be transplanted readily by taking the soil with the roots.

From a comparison of many kinds of honey plants, I am led to believe that the most reliable and valuable have tubular flowers. The clovers, golden honey plant, motherwort, catnip, horsemint, teasel, sourwood, button-bush, boneset, goldenrod, the asters, and the several varieties of the *scrophularia*, of which figwort is one, have all tubular flowers, which prevents speedy evaporation of nectar. On the contrary, there are few really good honey plants having open flowers. Among these the basswood and tulip tree stand first. In the former the nectar is secreted in the cup-shaped divisions of the calyx, which, with the protection of the corolla and stamens, hinders evaporation. The flowers of the tulip tree secrete a large amount of nectar, but, as it is greatly exposed, there is reason to believe that much of it is wasted.

The most open flower that I have seen is that of the spider plant, but it does not secrete a particle of nectar after 8 o'clock a.m., or if it does, it is all lost by evaporation. The flower opens about 5 p.m., and secretes nectar very rapidly. The bees then begin work, but darkness soon overtakes them. By morning a large drop can be seen in every flower, which if not taken by the bees soon disappears. Only about 4 hours of the day are available to the bees to work on this

plant. Although the drop of nectar is large, a very much larger quantity is secreted in the capacious flowers of the *Scrophularia chrysantha* and figwort, which form nectar continually night and day, but most freely when the sun shines.

The cleome, which is related to the spider plant, is a fair honey plant, the nectar being protected by a little bract upon the upper side of the stamens; but it is available to flies, ants, bugs, and bees almost without number. No other flower except the basswood is so pestered by all kinds of insects.

The mustards, including rape, the milkweeds, mignonette and buckwheat have all open flowers, and it is indisputable that this class of plants most often fails to supply nectar in any great amount. The most reliable honey plant, therefore, the one best calculated by nature for the honey bee is supplied with tubular flowers or with a corolla the divisions of which approximate in the form of a tube, as in the flowers of the white and sweet clover and locust, although the flower of the red clover is a perfect tube nearly one half inch long on the average.

The cultivation of annual honey plants, unless for some purpose other than their nectar, will scarcely pay the cost of yearly cultivation. But a good perennial can be made to pay a reasonable percentage on the value of the land to the bee-keeper. The perennial plants of this class that can be especially commended, are the motherwort, catnip, golden honey plant, and figwort. The three former being readily propagated, and able to contest the ground with any kind of weeds. The figwort, however, if well cared for the first season will hold its own afterwards. The most vigorous of all is the golden honey plant, the only trouble with it being that it takes a strong team and a good plow to turn a field of it under, when a crop of corn will eradicate it.

New Philadelphia, O.

For the American Bee Journal.

How I Extract Honey from Combs.

EUGENE SECOR.

I do not follow bee-keeping as a sole business, and am not trying to run a large apiary. I have only 19 colonies at present. I keep bees for the pleasure I find in pursuing the study, as well as for the profit there is in it; though for several years past I have made them pay a large interest on the investment. I am running some for comb honey, in sections, and the remainder for extracted honey, in two story hives. I keep a complete record of each colony, and by the method I pursue it is very easy to do so. On the top of each hive I keep a card with a memorandum of everything which is of interest.

When I wish to extract I take an empty hive, remove the cap of the hive from which I wish to extract (which is flat on top), and put the empty hive on it, raise the honey board (which is the old-fashioned

style, made of inch lumber), smoke the bees to drive as many as possible down into the brood-chamber, take out the frames of honey one by one, brushing off the bees with a bunch of asparagus tops, and place them in the empty hive. When this is done, I carry the honey into the cellar and put the hive on the scales, which are near the extractor, balance them, extract, and return the empty frames to the hive, balance again, and I learn the weight of the honey from that colony with but little trouble.

In a large apiary it might not be practicable to carry the honey into a building to extract, but I find it satisfactory, as it never excites robbers, and everything, except the honey I am getting, is stationary.

My extractor is a home-made affair, of my own design and manufacture, and although it has been in use for five or six years, it still works like a charm. I took the half of a molasses barrel, made a reel large enough to accommodate two frames, and got the motion by two horizontal wheels, one on the standard of the reel and the other fastened to the outside of the tub and connected by a band of twisted cord. The wheels are made of inch lumber slightly grooved, and one twice the diameter of the other. A peg in the large one answers for a crank. To keep the band from slipping, I wind it with smaller cord. The whole thing did not cost a dollar beside the "head-work."

Forest City, Iowa.

For the American Bee Journal.

Cultivation of Simpson Honey Plant.

J. G. STEER.

I see in the last number of the BEE JOURNAL a call for information on the cultivation of the Simpson honey plant. I beg leave to give a few notes through the columns of your excellent paper on the subject. My experience with it extends only through this season and last. I procured the seed and sowed in a bed of wood-earth very late—about the first of June. They came up poorly, but I got 200 set out, which blossomed in September and October, until after we had 2 or 3 severe frosts. Last spring they were the first living green to be seen. I took up the roots, some of which would not go in a half bushel, and divided them with a knife into as many sections as there were crowns started, sometimes as many as eight or ten. These I planted singly in rows 2 or 2½ feet high.

The idea is abroad that the Simpson honey plant is hard to propagate; I have not found it so. They need shade, and not too much water, as they will rot if too thick in the bed. The way I practice is this: If you have a small corner of timber land not too dense, clear it up and trim the trees up quite high, dig and level the ground and sow the seed thinly, and cover very lightly; reset them when 2 or three inches high, in rows 2 feet apart, and one foot in the row. If it is not seasonable, water and

shade them at first by means of a board laid on bricks over them. This all seems like a great deal of trouble, but after you get a start you can propagate more easily from the roots as above directed. Carefully save all your seed, and scatter it in all waste places, especially among trees if the shade be not too dense. Enough will grow and ripen—seed that will fall and come up thickly the next year, when you can set the plants out or let them grow where they are; when once started, they will care for themselves. I have briefly told you my plan of cultivation, or rather, propagation, for it will need no cultivation after the first year.

I will speak briefly of its qualities: It is a weed, but not pernicious. It began blooming here the first week in July, and for profusion of bloom I never saw anything like it. I have seen hundreds of bees on it, when not one was to be seen on the clover. It secretes honey constantly in wet or dry weather, and in such abundance that I have shaken it from the flower in drops. The rain does not affect it, as the flower hangs down, which is not the case with the spider plant. I have even found bees on it when it was raining too hard to be out-doors. In short, I consider it the very best honey plant grown, and do not mean to stop short of 10 acres of it. I shall not sow it on valuable ground, but think it will well pay to clear and trim up an acre of timber land each spring, and sow it, and, besides, it helps the appearance of things. I hope to hear from others on the subject of planting for honey, especially figwort.

For the American Bee Journal.

The Honey Harvest.

W. S. HART.

To help the editor to form an opinion of this year's crop of the United States, as soon as possible, I will say we had the poorest spring for bees within the memory of the oldest inhabitants, as a long continued drouth prevented all swarming, and in many cases so reduced the honey in the hives that feeding was necessary. In May, however, the dry spell "let up," and since then the bees have been doing well. Old ocean itself must lower several feet before our mangrove feels the effect of dry weather. Bees have been swarming for some weeks past, and I for one have lost quite a number of rousing swarms that would have largely increased my honey report, if retained. It is a new experience with me to have them come out and go to the woods, but my assistant was called away by the sickness of his wife, and I was left at the busy season without skilled help, and three small orange groves to see to besides my bees. I have, however, from 65 colonies on May 1st, taken about 6,800 lbs of honey, and expect to make it over 11,000 by the 10th of August. There is, probably, 2,500 lbs now in the hives ready for extracting. My neighbors' bees are doing splen-

didly, but I understand that away from where the mangrove grows, they have not done as well. The cabbage palmetto is now in bloom, so that the bees of the interior that have not already had a good harvest will have a chance to make a paying crop yet.

New Smyrna, Fla., July 28, 1882.

For the American Bee Journal.

The Common Sense Bee Hive.

G. W. DEMAREE.

Mr. Warran Clayton, a gentleman formerly residing at this place, but now a resident of Georgetown, Scott County, Ky., being on a visit to his mother, who lives near neighbor to us, has just handed me the enclosed circular. He informs me that a certain party is working up this "patent hive" in Scott County, and that the people are going "wild over it." I regret to see this delusion on the part of so intelligent a people as I know the people of Scott County to be. Kentucky is destined to be one of the great honey-producing States. Her medium climate, neither too cold nor too hot, her rapid conversion into a great stock-breeding and grazing State, her mountains, rivers, creeks and brooks, her wonderful virgin forests covering her mountains and hills, and skirting her rivers and streams, abundantly justify the prediction.

The working up of delusive "patent hives" is not to the best interest of bee culture. The exaggerations indulged in by the venders of "common sense" or rather "common nonsense" hives, is sure to result in disappointment and disgust on the part of those who for the want of information suffer themselves to be imposed upon by designing sharps. The BEE JOURNAL is the acknowledged exponent of American Apiculture, hence its opinions coming from the pen of its widely known Editor, is of more weight than if coming from any private source. I would be pleased if the Editor would discuss the essential feature of the movable frame hive system—showing that all the appliances of modern bee-keeping can be attached and accommodated to any of the standard frame hives. That the system of honey-producing—"side" and "top" storing—may be followed while using any of the movable frame hives.

Christiansburg, Ky.

[We have never seen one of the "common sense hives," but would judge from the descriptive cut on the circular kindly sent us by Mr. Demaree, that it is virtually the Mitchell hive, with hinges at one side of the bottom, and a sliding cover. With these exceptions, its counterparts have long been in use in the Buckeye hive, Mitchell hive, long-idea hive, and various others of the one-story hives, where division-boards or followers are used for contracting the brood chamber. We see no features or benefits

to be derived from its use that cannot be obtained from any of the non-patented movable frame hives, while there are two serious objections to its use—first of which is the restriction upon its general use, in the form of a patent right, and the next objection is the sliding cover. We cannot imagine how this latter feature can be made anything but objectionable.

We do not object to patents on articles which have commendable features about them—when the principle is new or a philosophical or mechanical principle applied to machinery or implements, making real, radical improvements; but the adoption of an old, or, as is often the case, obsolete principle, with a slight divergence from the original, and the issuance of a patent deed to dignify it as an *improvement*, or as an indorsement of its originality, is to that extent legalizing a fraud, and should not be countenanced. The circular devotes about half a page to "reasons why this hive is the best in use," but fails to describe the particular features which make it such. We would advise our friends in Kentucky to "severely let it alone," as also all other hives which have no real merit on which to base a patent, but which are hampered with one to prevent their coming into general use. What we want in America is not more patents on bee hives, but more unanimity in the use of a standard hive, simple in construction and free for all to manufacture and use.—ED.]

For the American Bee Journal.

Increase of Colonies.

A. J. NORRIS.

After reading Prof. Cook's valuable hints on increase of colonies, on page 474 of the BEE JOURNAL, I would like to give my ideas on the same subject.

1st. By all means I prefer natural swarms.

2d. Keep the bees from swarming as long as possible by giving plenty of room for queen and bees; they will give a nice lot of beautiful early honey and a very large swarm by so keeping them back.

3d. When they do swarm, run the first swarm in a nail keg or box, and keep this until a second swarm issues; now have a hive ready with 10 frames (if you use the Langstrath hive) of foundation, or empty combs, and 48 sections filled with foundation; go to the hive where the second swarm has issued and take one comb of larvæ and exchange with one frame in the new hive. This will keep the queen in her proper place. Put the new hive where the keg or box containing the first swarm stood, and shake them out of

the keg or box in front of the hive and capture the queen if possible, as they go in; if not, get the queen from the second swarm, which you will now shake down in front of the same hive, return the queen captured to the hive from whence she came, after cutting out all the queen cells. Now you have only one queenless colony, and that will have a queen in 24 hours, 10 beautiful combs which the queen has commenced to fill, and 48 sections under headway. Now take the colony that is deprived of a queen and make 8 or 9 nuclei, selecting the largest and finest developed queen cells. These nuclei can be used to supply queens for later swarms.

My method of transferring is as follows: Have a hive prepared with 10 frames of foundation, drum up the swarm that is to be transferred (as has been described many times in the BEE JOURNAL), and shake them in front of the new hive; if more than one is to be transferred, serve them the same way; now let the old hives stand 14 days and drum up the bees that have hatched in all the old hives, and run them into new hives prepared as for new swarms; run as many in a hive as it will hold with the 48 sections on. Now open the old hives and cut out the honey and what worker brood there is left; fit the worker brood into frames if you have no queen to supply, fit in a choice queen cell, and give each multiplied colony only one frame of this patched brood and a queen cell; if there is any left, give it to the weaker colonies. If properly attended to, you will have no more increase from them. The best time for transferring is just at the beginning of white clover bloom, or at the beginning of any honey flow, when not cold enough to chill the brood or too late in the fall.

Cedar Falls, Iowa.

For the American Bee Journal.

The Utility of Untested Queens.

W. Z. HUTCHINSON.

FRIEND NEWMAN:—Has my reply to Prof. Cook in the *Rural New Yorker* of June 24th escaped your notice? or has a press of other matter prevented you from publishing it? It is as follows:

First allow me to thank Prof. Cook for his kind words in a late article in the *Rural* on the above subject; they are fully appreciated. When an argument is so conducted that at its close each party has a higher opinion of his opponent, there is but little chance for hard feelings; if every one was like Prof. Cook, all arguments would be so conducted.

The only point that I endeavored to make in my former article, and the one that I have so persistently argued in the bee papers during the past few months, is that an unjust discrimination is made by some writers in favor of the so-called "tested" queens, when the only difference under the sun between them and the so-called "dollar" queens is, that the tested queens are known to be purely mated,

while, until the progeny of a "dollar" queen hatches, it is uncertain how she has mated; but in nine cases out of ten, "dollar" queens turn out to be purely mated, and thus are eventually tested queens. As before stated, both classes of queens are reared exactly alike, and yet column after column of our bee papers have been devoted to the condemnation of "dollar" queens and not one word has been said against the tested queens. Tested for what? Tested for "stripes" and—\$2; "only this and nothing more." Does not Prof. Cook think that the rearing and selling of tested queens for \$2, or even \$3, have cheapened queens fully as much as the "dollar" queen traffic?

As to how a queen should be tested, Prof. Cook says: "I would have him wait to see if the requisite number of eggs, bees, and pounds of honey are forthcoming, and then, when such assurance was gained, I would pay him \$10 for the queen and make money." I heartily agree with him, but I fail to see how or why the "dollar queen traffic" prevents any breeder from testing his queens in this manner and then asking a corresponding price for them. In fact, some breeders have already taken a step in this direction, as they offer for sale "dollar" queens, "purely mated" queens, "tested" queens, and "selected tested" queens. If some reliable breeder will keep his queens until they are a year old and test them thoroughly, I do not think that he will experience any difficulty in selling his "selected tested" queens at almost any reasonable price.

Prof. Cook says: "Does Mr. H. think that our Short-horn cattle would possess their present excellencies had there been no greater inducements to hard and persistent effort than that held out to the bee-breeders of today?" Candidly, friend C., I do not, and until the mating of our queen bees can be as easily controlled as the mating of cattle, sheep and other stock, I do not think that there will ever be any greater inducements held out to the bee-breeders to improve their bees than there are at present, even if the "dollar queen traffic" should be swept away. There is some inducement to buy, even at enormous prices, improved breeds of cattle, sheep and horses, because, with ordinary care, the offspring of such stock will be pure, and will, likewise, command a high price; but there is no such inducement to the purchase of an improved strain of bees, because, even with the greatest care, the young queens may mate with drones from some scrub swarms in the woods.

I do not wish to be understood as saying that there are no inducements to the purchasing of improved strains of bees; far from it. The inducements are many, but they are not so great or so many as to the purchasing of stock the breeding of which can be controlled. To a certain extent, of course, the mating of queens can be controlled; we can Italianize all of the bees in the vicinity of our apiary, but to have each stock within three or four miles produce number one drones,

would be an almost herculean task. When fertilization in confinement, or something of the sort, is made practicable, then, I doubt not, there will be plenty of breeders who will set to work and will succeed in producing a superior strain of bees. At present, however, in order to obtain positive results and know how they were obtained, so that it can be done again and again; it is necessary to adopt the plan put in practice by Mr. D. A. Jones—that of breeding bees upon isolated islands.

No one would be more pleased than myself to see an improvement in our bees. I try to be unprejudiced in the matter, but to me it appears that the rearing and selling of "dollar" queens does not "retard the progress of American apiculture," or stand in the way of the best achievements; any more than the rearing and selling of native cattle, sheep and horses prevent or hinder the development, breeding and dissemination of improved breeds of these animals. Instead of being a damage, I think that dollar queens have been a benefit and a blessing to apiculture. Thousands now have the peaceable, industrious and beautiful Italians, who would yet have the native bees had the prices of Italian queens been kept at a high figure, while any breeder is free to improve his bees as much as he pleases, and if he succeeds in producing a superior strain, he need have no fears but what he can sell his queens at a high price.

Rogersville, Genesee Co., Mich.

For the American Bee Journal.

Dunham vs. Given Foundation.

J. V. CALDWELL.

The comparative merits of the different styles of comb foundation now offered by different manufacturers is worthy of the most earnest and careful attention of the apiarists of this country. That there is a decided difference, does not admit of a doubt, but which is the best? That is the important point to be decided by the average bee-keeper.

I have taken as my subject this evening two of the popular makes. The Dunham machine is, to me, like an old and tried friend, and the longer I use it, the better I am satisfied with the product of its matchless rolls. My brother apiarist, Mr. Heddon, thinks first class foundation cannot be made on this machine without a large amount of trouble and vexation of spirit. Well, in all deference to his longer experience with foundation machines, I must say I can and do make first class foundation on this machine, and work also that satisfies a large and most fastidious class of customers. Mr. Heddon claims for the Given machine, a thin septum, and large, deep, but soft outlines, and that the bees manipulated it much quicker than the rolled foundation. Well, as the "test of the pudding is in the eating, let us see how the matter stands. He says: "Hive a prime swarm on 8 frames of the Given

wired foundation, and in 48 hours, you have 8 splendid combs completed." This I grant, but I have repeatedly this season hived full, strong swarms on a set of 11 frames, 8x19, filled with Dunham foundation, and in 3 days it would be filled with comb and honey, and every comb drawn out in a perfect manner, and with no sagging whatever, but to accomplish this, three things are necessary:

1st. The foundation must be made of good, tough wax.

2d. It must be fastened to the frame in the most perfect manner.

3d. It must (in my opinion) be made on the Dunham foundation machine.

Now, if there is a better machine made I want it, and my customers also will demand it, but I venture the assertion that where 1 pound of the Given is made and sold, 100 pounds of the Dunham is disposed of in like manner; but I think the real cause of Mr. Heddon's discarding the Dunham machine was his inability to make it do good and speedy work. I gave in my last article a fair statement of the amount of good work I could do on the Dunham machine, and Mr. Heddon gave a partial account of his work on the Given machine. He says he made 271 sheets with one lubrication of the book, but I would be pleased to know the size of the sheets and the amount of time he used in doing the work. Of course, we want only the best foundation to use in our apiaries, then let us in a friendly spirit bring out all the good points in this important branch of our business.

Cambridge, Ill., Aug. 8, 1881.

For the American Bee Journal.

How to Exhibit at the Fair.

J. H. MARTIN.

As I have had some experience in exhibiting my products at our county fairs, I will give a few hints for the benefit of those who are now preparing for such an exhibit.

We all have a little selfish motive in the display of our articles. If we manufacture bee-fixtures, we wish to extend our trade; if we sell honey, our object is to let people know where the genuine article can be found.

The summer of 1879 was a very good honey season with us, our 100 colonies averaged nearly 100 lbs. each, our best gave us 208 lbs. of extracted, and our best yield of comb honey was 106 lbs. This was the best yield of honey that any one had ever obtained in this county. We felt like bragging a little, and the bragging took the form of an exhibit at our County Fair. The exhibitor generally wishes to make as much of a spread as possible. It is, therefore, well to put your honey in small packages. We put up our 208 lbs. in pint fruit jars, and put six jars in a neat basswood crate. The crate was made so as to hold the top and bottom of the jar firmly, while the sides were open, giving a good view of the honey when the whole was piled up crate upon crate in pyramidal form.

Our comb honey was also put up in narrow crates of different lengths, with glass sides. In placing such an exhibit, it is a good plan to get before a window if possible. Your liquid honey will then show to good advantage. All of the honey should be carefully graded, basswood, clover and buckwheat. A few jars of each kind should be opened, and a few teaspoons in readiness to let those who desire test the different qualities of honey. Much can thus be accomplished toward educating people in relation to the taste of honey from different plants.

By the side of the honey exhibit should be the wax exhibit. The wax should be run in cakes of different size and shape. Our pile of wax was finished out with a sharp-pointed cone, with two small flags attached to it. Foundation in sheets, thick and thin, in wired frames, in sections, in long narrow ribbons looped up, and in various colors if you choose. A pretty centre for your wax exhibit is a beautiful wax cross and clinging vine.

It is needless to advise the exhibition of a foundation machine, extractor, knives, queen cages, etc., for these are the first things the bee-keeper usually thinks of, and will have a prominent place.

Finally, the observatory hive should be upon exhibition, and where the crowd can easily see it. We have seen several descriptions in the bee papers of late about such hives; but there is one point in my hive unlike any we have seen described, I will therefore tell how I make an observatory hive. My first hive was made to be placed upon a shelf, and if a person wished to look at the bees and queen the hive was passed around. Such a hive is in danger of being tipped over, or the glass smashed. I therefore improved my hive by placing a two inch block under the centre of the hive, in this was bored an inch hole; another board was provided with a peg two inches in length to fit this hole. This board was securely screwed to the shelf. The hive could thus be turned readily upon its centre, and it was placed where the crowd could stick their noses right against the glass. That hive was a success. There was a crowd of old and young around it all of the exhibition hours to see the queen bee. I have seen many a pair of spectacles adjusted to get a good view of her. The observer would then go off at a tearing rate to hunt up somebody else on purpose to see the queen bee.

An observatory hive should not be crowded too full of bees; just enough to cover the comb. It is a good plan to adjust the bees to the comb before you leave home. A comb at least a year old should be selected, with some sealed honey, plenty of empty cells, and perhaps, a little hatching brood. If you get a sensible queen in the hive, she will deposit eggs right before folks, and you will then have a clinching argument for those who do not believe there is a queen, or that one bee lays all of the eggs.

I think the above plan for an exhibit, with as much more as you wish to add, will give ample room for

almost any bee keeper to spread himself. Above all, do not attempt too much. Exhibiting bees on the wing will not work at a common county fair. We attempted too much once on a time, and made a failure of it.

One more point: insist on having your exhibit all together in one place. At some fairs your hive would be put in class 8, division 4, your honey in class 2, division 6. To divide your exhibit up in this way would destroy its utility and charm entirely. See the managers of the fairs several days beforehand, explain just what you want and how much room you want; get your location, and be on hand early in the morning on the first day of the fair. If the managers do not give you a good space, or if they go back on you, as they do sometimes, do not exhibit a thing at their fair, and if anybody tries to crowd you out of your space, or crowd on at each end, you can first remonstrate, then reason, and if that don't keep them off, then fight.

I could give several more items in relation to this subject, but I must save a little of my ammunition for a few of the other bee papers. I did think of writing my experiences all out for the BEE JOURNAL, then do as some of our eminent friends do, commence at the last paragraph and write back to the beginning and send it to *Gleanings*; then commence in the middle and write both ways and send it to the *Exchange*; then go over it diagonally for the *Magazine*, then take it on the bias for the *Instructor*, and so forth.

Hartford, N. Y., Aug. 9, 1882.

The National Convention.

We have received from Prof. Cook the following circular relating to the above convention. We greatly regret we shall not be able to attend, but circumstances beyond our control will make our absence imperative. We regret it more especially, as this will be a most interesting meeting:

The next meeting of the National Bee-keepers' Association promises to be a grand success. Such men as D. A. Jones, A. I. Root, James Heddon, O. O. Poppleton and Dr. J. P. H. Brown have promised attendance.

It is expected that the Association will visit in a body, the apiary of Mr. Hill, of Mount Pleasant, which is one of the best conducted in the States.

Mr. D. A. Jones will exhibit specimens of the bees of the Indies, including the famous *Apis dorsata*.

There will also be exhibited at each intermission, microscopic preparations, showing structure of the sting, mouth-parts, etc., and of the so-called dry feces of bees.

Let some bee-keeper of each leading city look after railroad rates. It will be the last week of the great Cincinnati Exposition. This is a great attraction, and will make it easy to secure reduced rates. Round trip tickets from Detroit are promised for \$5.

A. J. COOK, President.

SELECTIONS FROM OUR LETTER BOX

Foul Brood.—Bees have done very well here this season, so far. White clover has yielded good until about the first of August. On 10 swarms (spring count) and increase, I have put 725 one pound sections, and taken off 300, while the rest are from $\frac{1}{2}$ to $\frac{3}{4}$ full now, and 4 swarms went to the woods that I know of. I do not know how many more, as I have not watched them while swarming. My bees have had foul brood 4 years. Four years ago last May I spread the brood and inserted empty combs until the bees deserted one side, and cold weather coming on chilled it, and in a few weeks it was the foulest hive I ever saw, and the bees dwindled entirely away in 2 or 3 weeks more. The next two seasons were poor for honey, and the disease damaged them about 25 per cent. Last season and this being both good for honey, it has not damaged them more than 10 per cent. They are strong now and doing well, though I can see a little in every hive from the larvæ just beginning to melt down with it to the capped, perforated cells. I am thinking of brimstoning them this fall, and buying a new lot. Do you think I can keep them in the cellar where I did the others, and put them on the same ground without their getting it? I would like to know the experience of others who have kept foul brood several years.

E. W. FELTON.

Hastings, Minn., Aug. 5, 1882.

[We believe the cellar can be fumigated and disinfected so it will be safe to keep the bees there, but we doubt using the same stands and grounds, unless the winter be very severe.—ED.]

Customs Duties.—I purchased one of Mr. Jones' colonies of best Italian bees, which I received on the 30th of May. I had a good, strong swarm July 3d, which I had to put into a hive of empty frames, having written to Mr. Jones, as I thought, in good time for foundation, but as I learned since, he was too busy to attend to it in time, but I have received it since. I got a second swarm on the 11th, not so large as the first, still, I think, doing nicely, so I am now rejoicing over three good colonies of Italians. I am not boasting of having done anything great, neither do I feel capable of anything like that yet. I read of some who have had a shorter practice, outstripping me wonderfully; however, I take courage and go on in my own feeble way, and I do not know of anything that I could delight more in than working among bees. For the second swarm, I took a few of the best out of some old combs that I had by me, and fitted them into the frames the best way I could, by pegging them in, which the bees have fastened. I took a full

frame of honey from No. 1, and put into No. 3, for I have numbered them by making the figures 1, 2, 3, and gummed them on the hives in order, and as Nos. 1 and 2 are pretty strong in bees, I have taken two more frames to-day from No. 1, having both honey and brood, and put them into No. 3 to strengthen them in preparation for winter, and placed in No. 1 frames of foundation. I state this by way of inquiry, as to whether I have done right, or could have done better in some other way? I see but very few drones indeed; neither do I see any drone cells in any of the combs. I cannot say whether the queen of No. 3 has been mated or not, but a short time will tell. Will you please give me such information as you consider necessary on this subject, supposing it to be the case? I see in the present volume of the BEE JOURNAL, in answer to an inquiry whether there is any customs on "Bees and Honey sent to Canada," I think it is, and the answer is, there is not. I got that work from you, and was charged 15 cents customs, the book being valued about 30 cents. That makes the price pretty high. I find the BEE JOURNAL and "Bees and Honey" choice companions, real necessities; to possess and use them is to enjoy the beauties of nature. EDWARD MOORE.

Barrie, Ont., July 21, 1882.

[You did well in building up your third swarm from the two stronger. The queen with the last will have no trouble in mating, as the bees with an instinct almost equal to inspiration, provide for these contingencies.

There should have been no duty demanded on the book. When works are sent singly, either by mail or express, to actual readers, and not for traffic, they are not liable to customs duties.—ED.]

Good Season in Utah.—The prospect of a booming harvest for the bee-men of this county are beginning to be realized. There has not been a better year for the development and the true worth of the bee to be made known than the present year, although we have had some very cold storms that have kept the bees from doing many times what they desired to do. Out of 16 bee-keepers this spring, with 77 colonies of bees (5 having died since T. W. Lee reported to the Convention in Salt Lake City, April 6th), we now have 171 colonies, and 20 bee-keepers. The yield of honey I am not able to give at present; 3 swarms took to the mountains, and these swarms belonged to some of our old hands at the business. The honey yield would be much greater if we had more extractors, only 8 being in this settlement, and 20 should be the number, as those that have them cannot very well spare them around. I think the motto of Prof. Cook, "keep your colonies strong" is a good one, as I have done it in 2 colonies, and have taken 30 lbs. of honey from each top story of the 2 hives every week for the past 3 weeks.

I find the bees in some of my colonies are killing off drones as they get stronger. Our honey yield is not over yet, as we have plenty of lucerne, clover, corn, squash, flowers, etc. Sweet clover we also have, but it is going all over our field, and would be better without it if not controlled better. Would it be wisdom to use old comb that was in hives which were infected with dysentery? Would it not be better to melt the comb?

JOHN DUNN.

Tooele City, Utah, July 27, 1882.

[We cannot recommend using old combs where the bees have died from any cause; nor would we use moldy combs, except singly, and then only in very strong colonies, where they can be cleaned up thoroughly in two or three hours.—ED.]

A Honey Plant.—I send a honey plant for name, the last in bloom, and a profuse honey plant the first half of the season. We are having a dearth of honey-producing plants. Corn is just coming in tassel. J. D. ENAS.

Napa, Cal., July 19, 1882.

[The honey plant is *Heteromeles arbutifolia*, for which I know no common name. It belongs to the *Rosaceæ*, or rose family, and was formerly put by some botanists in the genus *Crataegus* or Hawthorns. We shall not, therefore, be surprised to learn of its attraction for bees, though its kindred with us do not retain long these attractions. The species is, so far as I know, confined to our western coast, except as it has been disseminated by man. It is esteemed worthy of cultivation as an ornamental shrub, but is not hardy in this latitude, east of the mountains. Its immediate relatives are natives of China and Japan, none of which bear out-of-door exposure with us.—T. J. BURRILL.]

Width of Sections.—An article appeared in No. 19, page 297, of the BEE JOURNAL, in regard to the use of 14 inch sections. Another in No. 29, page 456, entitled, "Width of sections, etc." This is a very interesting subject to me, and must be to all beginners, and I would like to hear the opinions of others on this point, for if we can get $\frac{1}{2}$ more honey without the expense and inconvenience of separators, and gain $\frac{1}{2}$ in space, it is a gain and saving worth looking after.

A BEGINNER.

Syracuse, N. Y., Aug. 7, 1882.

All Swarms and No Honey.—Bees in this locality have done nothing this summer. All swarms and no honey this far. Italians are working finely now, and will gather some surplus honey. I think we will have a splendid fall harvest, on account of the recent wet weather.

WM. HARTMAN.

New Harmony, Ind., Aug. 7, 1882.

Cleaning Wax Extractors.—This has been a very poor season for bee-keepers here. In the spring it was too cool for queen rearing; later, came almost continuous rain, bees losing fruit bloom. White clover blossomed, but yielded little nectar. Of basswood we have none worth mentioning. We shall have a few swarms, but little surplus honey for the year of 1882. Please tell in the BEE JOURNAL how to clean the basket of a wax extractor. W. R. YOUNG.

Myersville, Md., July 31, 1882.

[Perhaps the most convenient method is to immerse the basket in boiling water, when the wax will melt from it, and can be skimmed from the water when cool; or it can be wiped off by taking from the water and rubbed while hot. A strong solution of sal soda or benzine is said to remove the wax very readily by dissolving it, when it can be wiped off with a coarse cloth.—Ed.]

My Report to Date.—From 10 colonies, spring count, I have had 300 lbs. of comb honey, 100 lbs. of extracted, with an increase of 9 colonies. I may say that all of this honey was obtained from poplar bloom, in May; since that time the bees have been barely making a living. White clover was scarce and did not yield much nectar. Last fall in September we had a yield of honey from some source unknown sufficient to winter on. What may be expected this fall I cannot say. Taking it altogether, the season has been unpropitious. My smoker trade has helped me out of the drag very materially and I am in no wise discouraged. As I cannot do without the "JOURNAL" I herewith remit my subscription money.

W. C. R. KEMP.

Orleans, Ind., Aug. 9, 1882.

"Apis Mellifica."—Tell Mr. James Heddon to use a large dose of "aqua frumenti distillatum" just before going into his bee yard, and that it will not kill him; one poison kills another, just as quina to cinchonism cures malaria, or whisky, snake bite. I am no whisky head either. The honey season is over here. The bees are hanging out and lying around, nothing to do. Aster and the fall weed bloom will be in now in 10 days, then we'll have business.

J. A. BURROW, M. D.

Santa Fe, Tenn., Aug. 7, 1882.

Sweet Clover the Only Hope.—It is now very dry in this vicinity. White clover and linden are with the things that were, and if it was not for the sweet clover, bees would be idle. Still, they keep up their hum of rejoicing from sunrise until dusk, bringing load after load of transparent nectar, that God, in his allwise providence, causes to be secreted in the bloom of melilot or sweet clover.

H. W. GARRETT.

Coeyman's Hollow, N. Y., Aug. 7.

Dividing and Introducing.—Having received an Italian queen by mail, I opened a strong colony of blacks, hunted up the black queen and set the frame she was on in a new hive, placing alongside of it another frame of honey and capped brood, with adhering bees from the same hive. I then filled up the new hive (which contained the black queen) with frames of foundation, and placed it on the old stand. I next moved the old hive from which the black queen had been taken, to a new stand a short distance away, opened it and caged the Italian queen on a frame of honey and capped brood. She was released after 48 hours and moved about among her young subjects. The old bees by this time had apparently all left the hive and gone back to the old stand and joined their old queen. I examined the hive containing the yellow queen daily, and found the combs covered thickly with young bees, which were constantly emerging from their cells, but for two weeks scarcely any bees have appeared at the entrance of the hive, or gone out in quest of stores. A limited number are beginning work from the Italian queen's hive, while the hive where the old black is ruling seems as busy and populous as originally. The question is, was my practice the correct one? or, if not, how should it have been better? E.

Highlands, N. C., July 29, 1882.

[Your practice was quite right, as far as safety goes, but a little troublesome. You have seen but little work from the colony where the Italian queen was placed, because you depleted it entirely of field workers, and the young bees left were all engaged in nursing and brood-rearing.—Ed.]

Fertile Worker.—Mr. Osborn's letter in the BEE JOURNAL of the 17th ult., describes this bee similar to a case we had last fall. We found a queenless colony with a fertile worker. There was no brood in the hive except a few capped drones and three large queen cells attached to drone comb. On examination, we found the queens all dead. They had evidently lived until within a day or two of hatching. From all appearance, they were as well-developed queens of their age as I ever saw. What caused them to die has remained a mystery. It being too late in the season to rear a queen, we purchased a Cyprian queen. The bees kindly received her. She is now filling her third hive by natural swarming this summer. M. BROTHERS.

Fincastle, Ind., Aug. 2, 1882.

Ground is Baked like a Brick.—Our harvest of white honey is over, with but small surplus. Fearful hot and dry, and owing to the extreme wet previous to July 10th, the ground is baked like a brick, and vegetation is drying up. I do not expect any honey from buckwheat, on account of drouth.

G. M. DOOLITTLE.

Borodino, N. Y., Aug. 7, 1882.

Mr. Shuck's Problem.—I see a reply to Mr. Shuck's problem, which I believe to be incorrect, as I divided several colonies, which had the effect of giving them dysentery. The first I only noticed after three days, being absent for that time, but two others had the entrances bedaubed within one-half hour from the time of dividing. My bees, as yet mostly blacks, have the last few days been working on red clover. Allow me to widely differ from Mr. Heddon in his way of transferring. In the spring brood would be apt to chill, and they would be apt to be robbed then and later. I know of one man who tried the plan on the 24th inst., and a colony of Italians drained the old box of honey in a few hours. Basswood is just opening, and the trees are covered with bloom. So far there is nothing to crow about.

R. F. HOLTERMANN.

Fisherville, Ont., July 27, 1882.

[There is no need to drive so close as to risk chilling, and a very little trouble will avoid the danger of robbing for a few days, when new bees will be numerous enough to take care of the stores. It seldom, however, occurs that transfers will be made by this method when the weather is cold enough to endanger chilling, as it can be done as well during a honey flow as at any other time; whereas, by the old method, it is desirable to do so before there is a great deal of brood and not much new honey.—Ed.]

Juneau County, Wis.—One thing sure, we are happy with our bees for there is generally an abundant flow of the nectar in this region to support the bees and to produce from a little to a fair yield of surplus honey. For many seasons I have never failed to see the bee-keepers about the villages with their little boxes of honey for sale, and they never had much trouble in getting them off their hands. But, under the old management, and from the pressure of other duties, the yearly honey crop was always light, and there might have been times when little or no honey could have been bought within the limits of this county. A change has come over this business, so that under what is styled modern bee-culture, the production of honey has been prodigiously increased here until there are many tons of the precious sweet gathered in annually and put in the most desirable shape for the market and the consumer, and what cannot be disposed of in the local markets, is shipped to other parts of the world. But, happily there is a growing demand for the article at home, and the local market is being well supplied from the apiaries of the Hon. C. H. Grote, the Rev. H. V. Train and Mr. Franklin Wilcox, gentlemen who stand among the most learned, and at the same time most practical bee-men of Juneau County. They manage to keep their bees through the long and dreary winters,

which are quite frequently very cold in this latitude, although the last winter was a very mild and pleasant one, favorable to the safe wintering of bees. But with the first of March there came cool and gloomy days, clouds were hanging overhead in a threatening manner the whole month through, and it seemed as if winter was about to commence in earnest. To say that it was a disappointment, after having had such pleasant passage by the winter months only to get into a backward spring-time, is but a feeble expression; still, the weather was never bitter during the spring opening. April and May were not very good, still during those months and up to the present time there have been but a very few days that the bees have remained at home all day long. The present week has been a week of the most beautiful showers that I ever saw, and the clouds are still flying in haste towards the southwest, and as the light from the sun occasionally bursts forth through some of the openings above, the merest showers of rain are sometimes seen falling in the sunlight and producing scenes worthy of attention. The atmosphere is warm, the fields of buckwheat are getting whiter, and the bees are on their wings every hour during the day-time. From the present view of things about here, one would think of a heavy yield of surplus honey in the next few weeks to come, and of a mild winter following.

JOHN MORRIS.

Mauston, Wis., Aug. 5, 1882.

Entomological.—I herewith send you a worm that I caught on the alighting-board of one of my hives. When taken, it was about one inch in length, nearly blood-red, and about $\frac{1}{2}$ an inch thick. Please give it a name.

S. C. FREDERICK.

Coal Valley, Kan.

[The "worm" is the caterpillar of a silk-spinning moth, *Bombycidae*. It was only accidentally upon the alighting-board of the bee hive. It feeds only on green leaves, and I judge upon those of the soft maple, but the specimen is not in condition for me to certainly pronounce upon the species.—T. J. BURRILL.]

"Golden Dollars vs. Golden Bands."

—Mr. Benedict says, "There is another class of breeders who make it their steady aim to breed bees as light-colored as they can, and they have succeeded in producing what appears to be a distinct variety of bees." Perhaps this is true, but the majority of us keep bees for the honey that they will gather, and we care little whether the bees are a distinct variety or not, so long as the honey is forthcoming. We care much more for the golden dollars than we do for golden bands. Mr. B. further says, "Such breeders cannot afford to sell queens for a dollar each." Will he please tell us why it is any more expensive to breed from light-colored stock than from dark? Light-colored, home-bred queens can be obtained for breeding purposes of

reliable breeders, at much less figures than can imported queens, such as, at least, the majority of the breeders of dark bees and queens breed from.

W. Z. HUTCHINSON.

Rogersville, Mich., Aug. 4, 1882.

Whose Loss is it?—Two months since I received an order for a copy of Cook's Manual, which I can certify was immediately sent him by mail, properly addressed. The person who ordered it, now informs me that the book has not been received by him. I would like to know if it is right for me to suffer the loss and send him another copy? Please answer this question in the BEE JOURNAL, and oblige both the buyer and

THE AGENT.

[The loss is undoubtedly for the person ordering it, if it can be shown that it was properly mailed. Had it been registered, (costing 10 cents extra) it could have been traced, but now it cannot. Some dishonest employe of the mail service probably "appropriated" it. When such is ordered from this office and lost, we usually divide the loss with the person ordering, and although we have nothing to do with this transaction, we will send a copy to the person losing it, upon receipt of one-half of the price of the book, so as to save hard feelings between bee-men.—Ed.]

My Honey Crop.—I have already taken from my bees over 2,000 lbs. of as nice honey as I ever saw, and can take about 1,000 lbs. more in a few days. This season has been a very fair one with me, although the old style bee-keepers in this county have complained of the scarcity of honey and have secured very little surplus, and even that in bad shape. Honey is selling for 20c per lb. in 2 lb. sections, and 15c per lb. for extracted.

L. J. DIEHL.

Butler, Ind., Aug. 4, 1882.

Honey Enough to Winter On.—Bees have done nothing here this season. Strong colonies have now almost enough to winter them. September may yield us a surplus.

JOS. M. BROOKS.

Columbus, Ind., Aug. 5, 1882.

Iron Lugs for Hanging Broad Frames.

—I note the letter of Rusticus, in No. 31, 1882, about hanging broad frames without top-bar. I have sent out a number of hives with the device spoken of, and send you herewith two pairs of lugs, or projections, for the purpose. I now make my broad frames with wooden separators fixed permanent, nailed to stay, top bar removable, not nailed; and then with these metal projections, wide frames of sections are very handy. Two frames are placed face to face in the hive, and you have all the advantage of a four-inch box the size of the frame; after work is well started, turn half of the frames around and all the advantages of separators are secured, and none of

the disadvantages. To take out sections, pry off the top bar and all is easy. I have used them four years. No patent.

J. M. SHUCK.

Des Moines, Iowa, Aug. 3, 1882.

[The metal projections mentioned consist of cast iron, so made as to screw on the tops of the end-bars of the broad frames, and rest on the rabbets. Mr. Shuck describes above their method of using too plainly to require any attempt on our part, or to be misunderstood.—Ed.]

Afraid of Robbing.—My wife, self and one boy have attended 78 colonies and some 8 or 10 nuclei. Have taken 6 30-gallon barrels of honey (about 2.161 lbs.) with the extractor, and between 700 and 800 lbs. of comb honey. We have a good home market at 20c. for comb and 10c. for extracted honey. The harvest is just closing with us. Black sumac and privet or buck bush are our main resources for July. We will now have a honey dearth till the 1st of September, when will come the aster or hybrid Spanish needle, which gives us our largest crop in valley locations. I took most of my comb honey in 2 lb. sections, and found ready sale for it. My hives are full of honey and capped, and I fear that the queens will be crowded out. The bees are ill-natured, and I fear robbing if I extract any more. What would you do in such a case? I am using all the foundation they will draw out.

J. T. BRUTON.

Joplin, Mo., Aug. 5, 1882.

[Do your extracting mornings and evenings, when the bees are not flying much. It will be necessary, of course, to do the extracting in the honey-house, or a room that will be secure against intrusion. You can lift the outer frames in the morning, extract during the heat of day, and in the evening spread brood frames in the hive and return the empty combs, alternating them with the brood combs, or putting them in the center. Do not extract too close—four frames from each brood chamber should be sufficient.—Ed.]

A Good Season.—The honey season here has been a good one; white clover has been in bloom for eight weeks. My bees have done well in the sections; am using the 1 lb. section, and like it very much. Bees had quit swarming, but to-day I had a large swarm come off. The prospect is good for fall honey, as the cornfields are full of smartweed, owing to the wet weather.

J. V. CALDWELL.

Cambridge, Ill., Aug. 7, 1882.

A Fair Yield Anticipated.—Bees doing ordinarily well. Very few swarms cast this far, and but little surplus stored. Should the wet weather continue, I anticipate a fair yield of fall honey.

JOHN Y. DETWILER.

Doniphan, Kan., July 31, 1882.

THE AMERICAN BEE JOURNAL

ADVERTISING RATES.

20c. per agate line of space, each insertion.

A line of Agate type will contain about **eight words**; fourteen lines will occupy 1 inch of space. Transient Advertisements payable in advance. Special Notices, 50 cents per line.

DISCOUNTS will be given on advertisements published WEEKLY as follows, if the whole is paid in advance:

For 4 weeks.....	10 per cent. discount.
" 8 ".....	20 " "
" 13 " (3 months)....	30 " "
" 26 " (6 months)....	40 " "
" 39 " (9 months)....	50 " "
" 52 " (1 year).....	60 " "

Discount, for 1 year, in the MONTHLY alone, 25 per cent., 6 months, 10 per cent., 3 months, 5 per cent., if wholly paid in advance.

Discount, for 1 year, in the SEMI-MONTHLY alone, 40 per cent., 6 months, 20 per cent., 3 months, 10 per cent., if wholly paid in advance.

Advertisements withdrawn before the expiration of the contract, will be charged the full rate for the time the advertisement is inserted.

THOMAS G. NEWMAN,

925 West Madison Street., Chicago, Ill.

Special Notices.

Always forward us money either by postal order, registered letter, or by draft on Chicago or New York. Drafts on other cities, or local checks, are not taken by the banks in this city except at a discount of 25 cents, to pay expense of collecting them.

Bee Pasturage a Necessity.—We have just issued a new pamphlet giving our views on this important subject, with suggestions what to plant, and when and how. It is illustrated with 26 engravings, and will be sent postpaid to any address for 10 cents.

Premiums.—Those who get up clubs for the Weekly BEE JOURNAL for one year, will be entitled to the following premiums. Their own subscription may count in the club:

For a Club of 2,—a copy of "Bees and Honey."
" " 3,—an Emerson Binder for 1882.
" " 4,—Aplary Register for 50 Colonies, or Cook's (Bee) Manual, paper.
" " 5,—" " cloth.
" " 6,—Weekly Bee Journal for 1 year, or Aplary Register for 200 Col's.

Or they may deduct 10 per cent in cash for their labor in getting up the club.

Binders cannot be sent to Canada by mail—the International law will not permit anything but samples of merchandise weighing less than 8oz.

Honey as Food and Medicine.

A new edition, revised and enlarged, the new pages being devoted to new Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price of them low to encourage bee-keepers to scatter them far and wide. Single copy 6 cents, postpaid; per dozen, 50 cents; per hundred, \$4.00. On orders of 100 or more, we print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

Emerson Binders.—We have had a lot of Emerson binders made especially for the BEE JOURNAL for 1882. They are lettered in gold on the back, and make a nice and convenient way to preserve the JOURNAL as fast as received. They will be sent post paid by mail for 75 cents.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra.

Preparation of Honey for the Market, including the production and care of both comb and extracted honey. A new pamphlet of 32 pages. At the last meeting of the North American Bee-Keepers' Society, we were appointed on a committee to prepare instructions on the Exhibition of Bees and Honey at Fairs; this is also added to the above. Price, 10 cents.

Do not let your numbers of the BEE JOURNAL for 1881 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.

When you meet with an accident, get a sprained ankle, or otherwise injured, don't go to the expense of sending for a doctor, but apply Kendall's Spavin Cure, and you will experience instant relief.

Advertisements.

THE AMERICAN BEE JOURNAL is the oldest Bee Paper in America, and has a large circulation in every State, Territory and Province, among farmers, mechanics, professional and business men, and is, therefore, the best advertising medium.

PLEASE NOTICE the price of Tested Queens in the advertisement of W. Z. Hutchinson. He has a large stock of fine Queens on hand, and can fill orders promptly.

HENRY ALLEY, WENHAM, MASS.

Queens Worth \$2.00 for \$1.25.

Large, handsome and beautiful. Every one warranted as good in all respects as tested queens. No loss of queens by mail in my new cages—all go safely. Safe arrival and purity guaranteed. Italian, Cyprian and Holy Land Queens by return mail. No money required until queen is received.

Ten Colonies of Italian Bees

for sale at a bargain. Warranted Italian Queens, \$1.00 each. For particulars, address J. P. MOORE, Box 27, Morgan, Pendleton Co., Ky.

WANTED—A situation with practical apiarist, by a young man, carpenter, of experience with bees in Germany. Wages required moderate. Will make himself useful. Address FREDERICK LORENZEN, 36 Corneliuss street, Chicago, Ill.

WANTED—A situation in an apiary, by a young man of 3 years' experience. Will work cheap, and endeavor to give satisfaction. Address, DANIEL W. DUFFIELD, Dearborn, Mich.

To Foundation Manufacturers.

I have 80 lbs. of beeswax I wish made into comb foundation, some of it drone size, and some thin for boxes. Please send me samples and prices. Address, CHARLES FOLLETT, Osage, Iowa.

40 TONS

Of Comb Honey wanted; York State preferred. Say how much of each grade you will probably have, size of section, how soon it can be in shipping order (the whole or part of it), lowest cash price, and address F. I. SAGE, Wethersfield, Conn.

1882-Southern Headquarters.-1882

For Early Italian and Cyprian Queens;

Imported and Home-bred; Nuclei and Full Colonies. For quality and purity, my stock of bees cannot be excelled. I make a specialty of manufacturing the Dunham Foundation. Try it. If you wish to purchase Bees or Supplies, send for my new Catalogue, giving directions for introducing queens, and remarks on the New Races of Bees. Address:

DR. J. P. H. BROWN,
Augusta, Ga.

Rev. A. SALISBURY

Camargo, Douglas county, Ill.

20 Years Experience in Queen Rearing.

Our Motto is:

—"Low Prices. Quick Returns; Customers Never Defrauded." Italian Queens.....\$1; Tested.....\$2 Cyprian Queens.....\$1; Tested.....\$2 Palestine Queens.....\$1; Tested.....\$2 Extra Queens, for swarming season, ready, if we are timely notified. One-frame Nucleus, either Italian, Cyprian or Palestine, \$4; Colony of bees, either Italian, Cyprian or Palestine, 8 frames, \$8. Safe arrival guaranteed.

20c. paid for bright wax. Money Orders on Tuscola, Ill.

PRIZE QUEENS FOR 1882.

From the Evergreen Apiary.

REV. E. L. BRIGGS, of Wilton Junction, Iowa, will furnish Italian Queens from elite cross his Prize Mothers, as early in the coming season as they can be bred, at the following rates: Tested Queens, \$3; Warranted Queens, \$2; Queens without guarantee, \$1; Two comb Nucleus, with Tested Queen, \$4. Orders filled in rotation, as received, if accompanied with the cash.

AT LULING, TEXAS.

I breed PURE ITALIAN BEES AND QUEENS for sale; manufacture Hives of any style and Comb Foundation. Dealer in Novice Honey Extractors, Bingham Smokers, and everything used by modern bee-keepers. Write for prices. Beeswax wanted.
14w39t

J. S. TADLOCK.

FLAT-BOTTOM COMB FOUNDATION.



high side-walls, 4 to 16 square feet to the pound. Circular and samples free.

J. VAN DEUSEN & SONS,
Sole Manufacturers,
Sprout Brook, Mont. Co., N. Y.

BEESWAX.

I wish to buy a quantity of good yellow Beeswax. I am paying 25c. per pound, delivered here, Cash on arrival. Shipments solicited.
To avoid mistakes, the name of the shipper should always be on each package.

ALFRED H. NEWMAN.

923 West Madison Street, CHICAGO, ILL.

EVERY FARMER AND MILLER

SHOULD HAVE FISHER'S GRAIN TABLES, 192 pages, pocket form; full of useful tables for casting up grain, produce, hay; cost of pork, interest; wages tables, wood measurer, ready reckoner, plowing tables and more miscellaneous matter and useful tables for farmers and others than any similar book ever published. Ask your bookseller for it. Sent post-paid for 40 cents. Agents can make money selling this book.
For sale at the BEE JOURNAL Office.

65 ENGRAVINGS.

The Horse

BY B. J. KENDALL, M. D.

A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, a table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison; a table with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.

Price 25 cents.—Sent on receipt of price, by

THOMAS G. NEWMAN,

925 West Madison Street, CHICAGO, ILL.

\$777

A YEAR and expenses to agents, outfit free, address P. O. Vickery
Augusta, Maine. 36w1y

Given's Foundation Press.

The latest improvement in Foundation. Our thin and common Foundation is not surpassed. The only invention to make Foundation in the wired frame. All Presses warranted to give satisfaction. Send for Catalogue and Samples.

1w1y D. S. GIVEN & C., Hoopeston, Ill.

FREE! FREE!

Send for our 28-page Illustrated Catalogue of Bees, Queens and Bee-Keepers' Supplies before purchasing elsewhere. Choice bees, good goods, and satisfaction guaranteed.

11w6m E. A. THOMAS & CO., Coleraine, Mass.

DUNHAM COMB FOUNDATION—40c. per pound; extra thin and bright, 10 sq. ft. to the lb. 45c. Send for samples. Wax worked 10c. per lb. F. W. HOLMES, Coopersville, Mich. 13w1y

THIS PAPER may be found on file at Geo. P. Rowell & Co.'s Newspaper Advertising Bureau (10 Spruce St.), where advertising contracts may be made for it in NEW YORK.

Be SURE

To send a postal card for our Illustrated Catalogue of Apian Supplies before purchasing elsewhere. It contains illustrations and descriptions of everything new and valuable needed in an apiary, at the lowest prices. Italian, Cyprian and Holy Land Queens and Bees.

J. C. & H. P. SAYLES.

4sm15t

Hartford, Wis.

EXCELSIOR HONEY EXTRACTORS.



In answer to frequent inquiries for Extractors carrying 3 and 4 Langstroth frames, I have concluded to adopt these two new sizes. The 3 frame basket is in a can of the same size and style as the 2 frame. The 4 frame basket is in the larger can, with the cone or metal standard for the basket to revolve upon, leaving room underneath the basket for 75 or 80 lbs. of honey. It will be complete, with covers, and in every way identical, except in size, with the \$16.00 Extractor, 13x20, which is intended for any size of frame.

Excepting with the \$8.00 Extractors, all the different styles have strainers over the canal leading to the honey gate, and movable sides in the Comb Baskets. The \$8.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x13 inches.....	\$8 00
For 2 Langstroth " " 10x18 " ".....	8 00
For 3 " " " 10x18 " ".....	10 00
For 4 " " " 10x18 " ".....	14 00
For 2 frames of any size, 13x20 " ".....	12 00
For 3 " " " 12x20 " ".....	12 00
For 4 " " " 13x20 " ".....	16 00

ALFRED H. NEWMAN,

923 West Madison Street, Chicago, Ill.

HONEY

For the past few years I have made this excellent food my leading article. Having the best established reputation in this city as a dealer in PURE HONEY direct from the Apiaries, enables me to obtain the highest market prices. Your commitments and correspondence respectfully solicited.

R. A. BURNETT, Commission Merchant,

Successor to Conner, Burnett & Co.,

28w13t 161 So. Water Street, Chicago, Ill.

100 Colonies

FOR SALE. ALSO,

TESTED AND DOLLAR QUEENS
AND
BEES BY THE POUND.

Send address for prices.

1w35t JAMES HEDDON, Dowagiac, Mich.

W. Z. HUTCHINSON,

Rogersville, Genesee County, Mich.,

Makes a specialty of rearing fine Italian Queens. All queens bred from imported queens, and from the purest and best home-bred queens, and the cells built in full colonies. No black bees in the vicinity. Single queen, \$1.00; six queens for \$5.00; twelve or more, 75c. each. Tested queens, \$1.50 each. Safe arrival by mail guaranteed. Send money by draft, registered letter, or by money order drawn on Flint, Mich. 26sm1f

HEADQUARTERS FOR THE

Golden Italians & Original Albinos,
BEES AND QUEENS.

Send for Circular. J. M. C. TAYLOR,

10sm1f Lewistown, Frederick Co., Md.

Fruit Evaporators,

To be used on a common cooking stove, capacity 3 to 5 bushels per day. Price, complete, \$10.00 in the flat, partly put together, for \$6. A few agents wanted. For particulars and prices for Evaporators, Queen Bees, etc., address

JOHN H. MARTIN.

9sm1y

Hartford, Wash. Co., N. Y.

MY 16-PAGE PRICE LIST of Italian, Cyprian and Holy Land Bees, Queens, Nucleus Colonies and Apian Supplies, will be sent to all who will send me their name and address on a postal card.

14sm1f

H. H. BROWN,

Light Street, Col. Co., Pa.

A NEW BEE BOOK!

Bees & Honey

OR THE

Management of an Apiary for Pleasure and Profit; by

THOMAS C. NEWMAN,

Editor of the Weekly Bee Journal.

It contains 160 profusely illustrated pages, is "fully up with the times" in all the various improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the honey bee, and at the same time produce the most honey in its best and most attractive condition. Chief among the new chapters are "Bee Pasturage a Necessity," "Management of Bees and Honey at Fairs," "Marketing Honey," etc. Price, bound in cloth, 75 cents; in paper covers, 50 cents, postpaid.

925 W. Madison Street, Chicago, Ill.

Appreciative Notices.

Carefully prepared for beginners.—Farmers Cabinet, Amherst, N. H.

A very valuable work to those engaged in bee-raising.—News, Prairie City, Iowa.

We advise all who keep bees to send for this excellent work.—Journal, Louisiana, Mo.

Its chapter on marketing honey is worth many times its cost.—Citizen, Pulaski, Tenn.

Carefully prepared, and of vast importance to bee-raisers.—Indianian, Clinton, Ind.

A neat and abundantly illustrated hand-book of apiculture.—American Agriculturist, N. Y.

New and valuable, and embellished with 109 beautiful engravings.—Democrat, Salem, Ind.

Much practical useful information, in a cheap form.—Daily Standard, New Bedford, Mass.

Contains all the information needed to make bee-culture successful.—Eagle, Union City, Ind.

Just such a work as should be in the hands of every beginner with bees.—News, Keithsburg, Ill.

A valuable work for all who are interested in the care and management of bees.—Democrat, Allegan, Mich.

The most perfect work for the price ever yet produced on the subject of bee-culture.—Anti-Monopolist, Lebanon, Mo.

The engravings are fine. It is gotten up in the very best style, and is cheap at the price.—Farmer, Cleveland, O.

It comprises all that is necessary for successful bee-culture, save experience and good judgment.—Daily Republican, Utica, N. Y.

A manual, containing all the newest discoveries in the management of these little workers.—Plain Dealer, St. Lawrence, N. Y.

Full of practical instruction, that no one who contemplates keeping bees can do without.—Farmers' Journal, Louisville, Ky.

Gives minute details for the management and manipulations necessary to make bee-keeping a success.—Col. Valley and Farm.

It embraces every subject that can interest the beginner in bee-culture. The engravings perfectly illustrate the text.—Farm and Fireside, Springfield, O.

Embraces every subject of interest in the apiary, giving very thorough details of the management and manipulations necessary to make bee-keeping a success.—Farm, Longmont, Colo.

Written in an interesting and attractive manner, and contains valuable information for all readers, even though they be not directly interested in the care of bees.—Sentinel, Rome, N. Y.

It is a valuable and practical book, and contains a complete resume of the natural history of the little busy bee, as well as of all that one needs to know in their care and management.—Chicago Herald.

Describes all the newest discoveries in the art, by which the production of delicious and health-giving honey is obtained, as well as how to prepare it for the market in the most attractive shape.—Signal, Napoleon, O.

Contains a vast fund of information in regard to bee-culture. He who would keep abreast of the times must keep posted in all the improvements in his line. We advise all interested to get a copy of this book.—Daily Times, San Bernardino, Cal.

It embraces every subject that will interest the beginner. It describes all the newest discoveries in the art by which the production of delicious and health-giving honey is obtained, as well as how to prepare it for the market in the most attractive form. It is embellished with beautiful engravings, and is the most perfect work of the kind, for the price, that has ever come under our notice.—Farmer, Lancaster, Pa.

A Liberal Discount to Dealers the Dozen or Hundred.